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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/153,631	09/15/1998	KARIM YOUNES	ROKWELL.036A	5801

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EXAMINER

OPSASNICK, MICHAEL N

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/153,631

Applicant(s)

YOUNES ET AL.

Examiner

Michael N. Opsasnick

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/3/04 - 2/15/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1a). The advisory action mailed on October 27, 2003 was improper because the office action mailed on 7/3/2003 was inadvertently entered incorrectly as a final office action. Therefore, the finality of the office action mailed on 7/3/2003 is removed (and hence invalidating the advisory action mailed on 10/27/2003). The following office action is a repeat of the office action mailed on 7/3/2003, and is a **non-final** office action.

Claim Rejections - 35 USC § 103

1b). The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3,5,6,8-12-19,21-27-33,35-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ladden et al (5885003) in view of Yin (6104996) in view of Tamba et al (6130577) in further view of Parvulescu et al (6002719).

As per claims 1,8,9,18,19,27,29,30,37,39, Ladden et al (5885003) teaches a wireless communication system (abstract) comprising:

"a base station which transmits signals" as bss (Fig. 1)

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"a mobile unit.....wherein the first speech coder" as mobile station having codec A and codec B (Fig. 2 subblocks 200-202

"a signal strength detector.....mobile unit....a code selector in the mobile unit which directs the mobile unit.....quality of the signals" as sensing the quality of the signal and sending messages to switch to an alternated codec if the quality is poor (col. 5 lines 30-38). Ladden et al (5885003) teaches the location of the code selector in the mobile unit (Fig. 5, subblock 509 -- the instruction comes from BSS, but the actual code selection occurs in the MS -- mobile unit)

Ladden et al (5855003) fails to explicitly state "when the quality exceeds predetermined levels" (Ladden et al (5885003) teaches the use of a quality sensor that determines if speech is of a certain quality). Therefore, it would have been obvious to one of ordinary skill in the art of speech processing to modify the teachings of Ladden et al (5885003) to state when the quality exceeds predetermined levels because when the quality sensor determines if speech is of certain quality, that quality determination step includes some comparison to a threshold.

Ladden et al (5855003) does not explicitly teach compatible coders, however, Yin (6104996) teaches dual coding modes contained within a single coder (Yin (6104996), abstract, Fig. 9, subblocks 100 and 1108). Therefore, it would have been obvious to one of ordinary skill in the art to modify the teachings of Ladden et al (5855003) with using compatible coders and a mode signal contained within the coder because it would reduce the complexity of (col. 1 lines 43-47, and col. 12 lines 35-45).

The combination of Ladden et al (5885003) in view of Yin (6104996) does not explicitly teach self contained commanded switching of the codec, however, Tamba et al (6130577)

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teaches self contained switching of the codecs in the wireless device (Fig. 21, col. 11 lines 18-26). Therefore, it would have been obvious to one of ordinary skill in the art of cell phone technology to modify the teachings of Ladden with a self contained switching codec because it would provide higher speed access and accuracy (Tamba et al (6130577), col. 16 lines 54-57)

The combination of Ladden et al (5885003) in view of Yin (6104996) in view of Tamba et al (6130577) does not explicitly teach using a compression technique to save power, however, Parvulescu et al (6002719) teaches using compression techniques to reduce battery drain (col. 3 lines 55-66). Therefore, it would have been obvious to one of ordinary skill in the art of speech processing to modify the teachings of the combination of Ladden in view of Tamba with using a compression to technique that requires less processing because it would prolong battery life (Parvulescu et al, col. 4 lines 55-60). Examiner also notes that in using a compression technique, the represented signal is not as accurate as the original signal, and therefore it is inherent in the Parvulescu reference that a less accurate representation of the original signal is chosen in order to reduce power consumption and to extend battery life.

As per claims 2,10,15,31,33,40 Ladden et al (5885003) teaches switching from one codec to the other when speech quality is poor (col. 5 lines 30-38); and user control of switching (col. 4 lines 3-5).

As per claims 3,5,11,12,23-25,26,38,41,42 Ladden et al (5885003) teaches coder selector bypass (Fig. 3, subblock 303,306, and 309), bit exact and non-bit exact coders (one codec is for

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speech, the other for speech recognition --> col. 3 lines 19-24), first and second coders are compatible (both codec are related to speech, col. 3 lines 25-41),

As per claim 6,16,17,43, Ladden et al (5885003) teaches frame bit error and parity check (inherent in the telecommunication protocols --> col. 2 lines 50-59).

As per claims 13,14,21,22,28,32,36,44, the combination of Ladden et al (5885003) in view of Yin (6104996) in view of Tamba et al (6130577) in further view of Parvulescu et al (6002719) teaches switching between a speech recognition system versus simple voice communications (Ladden et al, col. 3 lines 19-24); power and processor loading conservation (Parvulescu et al (6002719), col. 3 lines 55-66).

3. Claims 7,20, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ladden et al (5885003) in view of Yin (6104996) in view of Tamba et al (6130577) in view of Parvulescu et al (6002719) in further view of Wheatley, III (5469471).

As per claims 7,20, and 34, Ladden et al (5885003) in view of Yin (6104996) in view of Tamba et al (6130577) in further view of Parvulescu et al (6002719) does not explicitly teach power and adjustment level techniques. However, Wheatley, III (5469471) teaches power measurement and dynamic power control in a mobile unit (Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art of speech processing to modify the teachings of Ladden et al (5885003) in view of Yin (6104996) in view of Tamba et al (6130577) with power measurements and adjustment of levels because it would advantageously allow the unit to maintain a proper power level as channel conditions change (col. 2 lines 48-52).

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Response to Arguments

4. Applicant's arguments with respect to the claims (in particular, the compatibility of the codecs) have been considered but are moot in view of the new ground(s) of rejection.

5. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (703)305-4089, who is available Tuesday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To, can be reached at (703)305-4827. The facsimile phone number for this group is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer Service telephone number is (703) 306-0377.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mno
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**VIJAY CHAWAN
PRIMARY EXAMINER**